

Claim 5

Line 1, after “devices” insert – and capacitors -.

Claim 6

Line 1, after “devices” insert – capacitors -.

Claim 7

Line 1, after “devices” insert – and capacitors -.

Line 2, after “solvents” insert – of different evaporation rate, an active material -.

Claim 8

Line 1, after “devices” insert – and capacitors -.

Claim 9

Line 1, after “devices” insert – and capacitors-.

Line 2, after “5” delete “or 6”.

Claim 10

Line 1, after “devices” insert – and capacitors -.

Line 2, after “5” delete “or 6”.

Claim 11

Line 1, after “devices” insert – and capacitors -.

Line 2, after “5” delete “or 6”.

Claim 12

Line 1, after “devices” insert – and capacitors -.

Line 2, after “4,” delete “or 5, or 6,”.

Claim 13

Line 1, after “devices” insert – and capacitors -.

Line 2, after “5,” delete “or 6,”.

**Claim 14**

Line 1, after “devices” insert – and capacitors -.

Line 2, after “5,” delete “or 6,”.

**Claim 15**

Line 1, after “devices” insert – and capacitors -.

**Claim 16**

Line 1, after “devices” insert – and capacitors -.

**Claim 17**

Line 1, after “devices” insert – and capacitors -.

**Claim 18**

Line 1, after “devices” insert – and capacitors -.

**Claim 19**

Line 1, after “devices” insert – and capacitors -.

Add new claims 20 , 21, 22 and 23 as shown below.

Claim 1 (currently amended):

Manufacturing method of electrodes for lithium based electrochemical devices and capacitors, in which a length of a metal grid is dip-coated by an active material slurry, and said length is then pulled vertically upward through a solidification chamber, in which said dip-coating is solidified.

Claim 2 (currently amended) :

Manufacturing method of electrodes for lithium based electrochemical devices and capacitors, in which a length of an expanded metal foil is dip-coated by an active material slurry, and said length is then pulled vertically upward through a solidification chamber, in which said dip-coating is solidified.

Claim 3 (currently amended) :

Manufacturing method of electrodes for lithium based electrochemical devices and capacitors, in which a length of a perforated metal foil is dip-coated by an active material slurry, and said length is then pulled vertically upward through a solidification chamber, in which said dip-coating is solidified.

Claim 4 (currently amended) :

Manufacturing method of electrodes for lithium based electrochemical devices and capacitors, in which a length of a solid metal foil is dip-coated by an active material slurry, and said length is then pulled vertically upward through a solidification chamber, in which said dip-coating is solidified.

Claim 5 (currently amended):

Manufacturing method of electrodes for lithium based electrochemical devices and capacitors, as described in claim 1, in which said length of said grid is treated by a solvent resistant and electrically conductive primer, prior to said dip-coating.

Claim 6 (currently amended):

Manufacturing method of electrodes for lithium based electrochemical devices and capacitors, as described in claim 2, or 3, or 4, in which said length of said foil is treated by a solvent resistant and electrically conductive primer, prior to said dip-coating.

Claim 7 (currently amended) :

Manufacturing method of electrodes for lithium based electrochemical devices and capacitors, as described in claims 1, or 2, or 3, or 4, in which said slurry includes at least two solvents of different evaporation rate, an active material , a carbon black and a polymer binder.

Claim 8 (currently amended):

Manufacturing method of electrodes for lithium based electrochemical devices and capacitors, as described in claim 7, in which said solvents include acetone in the range of 42 to 54 weight % (percent) and N-methylpyrrolidinone in the range of 6 to 23 weight % (percent), said polymer binder is polyvinylidene fluoride homopolymer in the range of 1 to 8 weight % (percent), said active material is in the range of 24 to 37 weight % (percent), and said carbon black is in the range of 1 to 8 weight % (percent).

Claim 9 (currently amended) :

Manufacturing method of electrodes for lithium based electrochemical devices and capacitors, as described in claim 5 ((or 6)), in which said primer is a mixture of a solution of lithium polysilicate in water and a carbon black.

Claim 10 (currently amended) :

Manufacturing method of electrodes for lithium based electrochemical devices and capacitors, as described in claim 5 ((or 6)), in which said primer is a mixture of a carbon black and a solution of polyvinylidene fluoride homopolymer in at least two solvents.

Claim 11 (currently amended):

Manufacturing method of electrodes for lithium based electrochemical devices and capacitors, as described in claim 5 ((or 6)), in which said length has masked areas of intended terminal tabs by solvent resistant adhesive tapes, prior to said primer treatment, and said adhesive tapes are removable.

Claim 12 (currently amended):

Manufacturing method of electrodes for lithium based electrochemical devices and capacitors, as described in claim 1, or 2, or 3, or 4, ~~or 5, or 6~~, which additionally includes an electrode cleaning step of intended terminal tabs area by buffing and vacuuming after said coating.

Claim 13 (currently amended) :

Manufacturing method of electrodes for lithium based electrochemical devices and capacitors, as described in claim 1, or 2, or 3, or 4, ~~or 5, or 6~~, which additionally include an electrode cleaning step of the intended terminal tab area by sand blasting and vacuuming after said coating.

Claim 14 (currently amended) :

Manufacturing method for lithium based electrochemical devices and capacitors, as described in claim 5, ((or 6,)) in which said primer is a mixture of a solution of lithium polysilicate in water and a carbon black, and a said length is dip-coated by said primer and is pulled over a roller horizontally after dipping while hot air is applied on said coating.

Claim 15 (currently amended) :

Electrode structure for lithium based electrochemical devices and capacitors, which includes a metal grid and an electrode material coating on said grid, the improvement therein said grid is embedded in the middle of said coating by a dip-coating method.

Claim 16 (currently amended) :

Electrode structure for lithium based electrochemical devices and capacitors, which includes an expanded metal foil, and an electrode material coating on said foil, the improvement therein said foil is embedded in the middle of said coating by a dip-coating method.

Claim 17 (currently amended):

Electrode structure for lithium based electrochemical devices and capacitors, which includes a perforated metal foil and an electrode material coating on said foil, the improvement therein said foil is embedded in the middle of said coating by a dip-coating method.

Claim 18 (currently amended):

Electrode structure for lithium based electrochemical devices and capacitors, which includes a solid metal foil and an electrode material coating on said foil, the improvement therein said foil is embedded in the middle of said coating by a dip-coating method.

Claim 19 (currently amended):

Electrode structure for lithium based electrochemical devices and capacitors, as described in claim 15, or 16, or 17, or 18, in which said grid or foil is treated by a solvent resistant and electrically conductive primer before said coating.

**Claim 20 ( new) :**

**Manufacturing method of electrodes for lithium based electrochemical devices and capacitors, as described in claim 6, in which said primer is a mixture of a solution of lithium polysilicate in water and a carbon black.**

**Claim 21 (new) :**

**Manufacturing method of electrodes for lithium based electrochemical devices and capacitors, as described in claim 6, in which said primer is a mixture of a carbon black and a solution of polyvinylidene fluoride homopolymer in at least two solvents.**

**Claim 22 (new) :**

**Manufacturing method of electrodes for lithium based electrochemical devices and capacitors, as described in claim 6, in which said length has masked areas of intended terminal tabs by solvent resistant adhesive tapes, prior to said primer treatment, and said adhesive tapes are removable.**

**Claim 23 (new) :**

**Manufacturing method for lithium based electrochemical devices and capacitors, as described in claim 6, in which said primer is a mixture of a solution of lithium polysilicate in water and a carbon black, and a said length is dip-coated by said primer and is pulled over a roller horizontally after dipping while hot air is applied on said coating.**